

(19)



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **02084526 A**

(43) Date of publication of application: **26.03.1990**

(51) Int. Cl. **D06M 10/06**

D01F 6/18, D01F 6/38, D01F 9/22, D01F 11/16  
// D06M101:40

(21) Application number: **63203889**

(22) Date of filing: **18.08.1988**

(71) Applicant: **ASAHI CHEM IND CO LTD**

(72) Inventor: **TAKADA JIRO**

**HOSOI KEIZO**

### (54) **PRODUCTION OF HIGH-STRENGTH CARBON FIBER**

(57) Abstract:

**PURPOSE:** To readily obtain carbon fiber of high-strength and high-adhesiveness with low cost and safety by anodizing carbon fiber obtained by baking acrylic fiber having specific lightness difference in an aqueous solution of electrolyte containing nitrate ion.

**CONSTITUTION:** An acrylic fiber having  $\geq 60$  lightness difference by iodine-adsorbing method (prefer-

ably containing 90-97wt.% acrylonitrile) is baked (preferably made to flame-resistant in oxidative atmosphere at 200-400°C and carbonized in inert atmosphere at 1200-1400°C) and resultant carbon fiber is anodized (preferably with 30-400 coulomb/g at 30-80°C for 0.1-3 min) in an aqueous solution containing nitrate ion (preferably 1-10 N concentration of nitric acid), then heat-treated (preferably in reducing atmosphere at 300-700°C) to afford a carbon fiber of high-strength.

COPYRIGHT: (C)1990,JPO&Japio